the U.S. dollar as the reserve currency. An investor (foreign or domestic) decides to invest \$2 million in a country with a currency board. To buy the local goods, machines and labor required for the investment, the investor needs the local currency and to that end, hands over \$2 million to that country's currency board. In exchange, the local currency board gives the investor local currency (say, pesos) at the rate established by the fixed exchange rate (say, 2 pesos per dollar). In other words, the currency board gives the investor 4 million pesos of the currency board's money in exchange for the investor's \$2 million. This currency board money is nothing but the bills and coins people carry in their wallets. These bills and coins are actually the currency board's liabilities—that is, upon demand the currency board must exchange those bills and coins for the reserve currency.

Part of the fiduciary money issued by the currency board will remain in the public's wallets, but the rest will be deposited in commercial banks. Those bills and coins (that is, the currency board's liabilities in the form of money) in the banks become the commercial banks' cash reserves, which they use to make loans and create deposits through the standard money multiplier.

Chart 1 depicts a hypothetical economy in which half the money created by the currency board stays in the public's wallets and the rest is deposited in commercial banks. Typically, the public withdraws only a fraction of the banks' cash reserves on any given day. In this example, banks must satisfy, on average, daily cash withdrawals of only half their cash reserves, or 1 million pesos. One million pesos, then, would be left idling in the banks' vaults. Of course, profit-driven bankers will lend that money by opening accounts against which borrowers can issue checks for up to 2 million pesos.

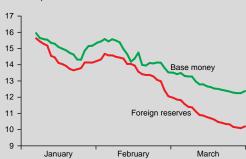
In this example, total deposits in the banking system after the loans

Argentina's Currency Board During a Financial Crisis

Argentina's recent experience demonstrates what can happen with a currency board during a financial crisis. Argentina's monetary policy has operated very much as a currency board would have since April 1, 1991, when the country's congress approved a convertibility law.

The law obligated the central bank to issue domestic currency (the peso) only against the dollar value of foreign re-

serves. The law also fixed the exchange rate at 1:1, or \$1 per peso. This standard is the basic rule for money creation under a currency board arrangement. Under the convertibility law, ArgenArgentina: Base Money and Foreign Reserves, 1995 Billions of pesos



tina's base money and foreign reserves should move very much in tandem, as they do in Chart A. This pattern is typical of currency board regimes, under which base money increases as foreign reserves rise and decreases as foreign reserves fall.

As the chart shows, foreign reserves started to fall in Argentina in January 1995, when the tequila effect spread and investors withdrew capital from the country in fear of a devaluation. The chart makes apparent that currency boards are not seen as everlasting protection against devaluation. The reason is because the same currency board features that prevent devaluations can exacerbate fears that the currency board will be abandoned. Under a currency board, a relatively minor Orange County-like liquidity crisis can become a full-blown financial panic almost overnight. This is what happened in Argentina. In such circumstances, governments come under rising pressure to restore the lender of last resort function that is part of monetary policy under a central bank but is incompatible with a currency board regime.

Argentina's problem started with a liquidity squeeze in Bank Extrader, a small bank that held barely 0.2 percent of all the deposits in Argentina's financial system. Extrader was heavily exposed in Mexican bonds and securities. When the value of those assets fell dramatically in the aftermath of Mexico's December 20, 1994, peso devaluation, the bank could no longer cover its short-term liabilities, particularly time deposits. This shortage triggered a bank run, making matters even worse. On January 18 the central bank was forced to liquidate Extrader. Suddenly, the effect seen elsewhere in Latin America spilled into Argentina's domestic financial markets. Fear that other banks were also heavily exposed to the collapsing Latin American capital markets led depositors to withdraw their money from the banks for the security of their mattresses or accounts abroad.

By April 30, the financial system had lost 18 percent of the deposits it had before the Mexican peso devaluation. To cover the withdrawals, the banks were forced to liquidate assets. One liquidation method was not to renew lines of credit to consumers and businesses. Many businesses and consumers could not pay off the loans on such short notice. When they did, it was by not paying other obligations. In turn, the beneficiaries of those debts could not meet their obligations, and so on.

In the wake of this panic, many banks had to suspend the payment of deposits. Some investors foreign and domestic alike—have not yet been able to recover their savings. Real economic activity in Argentina has followed the decline of financial indicators. Sales of cars, apparel and consumer electronics had fallen 20 to 40 percent by the end of April. Although currency boards are supposed to prevent the kind of financial meltdown Mexico experienced, Argentina found itself in a crisis despite its monetary policy.

Given the magnitude of Argentina's credit crunch, one wonders why Argentina has not followed Great Britain's example and suspended its currency board arrangement until the financial crisis is resolved. The answer, as a great deal of economic research suggests, lies in the monetary authority's credibility.

Argentina lacks the distinguished track record that the Bank of England had when it suspended the gold standard. In fact, Argentina has made into the Guinness Book of World Records for its historically high inflation rates and, in particular, its hyperinflations of 1989-90, when inflation rates reached 200 percent per month. Therefore, it's likely that investors would perceive a temporary suspension of the currency board announced by the monetary authority as permanent. Such a perception would weaken investor confidence and make the reconstruction of the financial sector more difficult and protracted, which, in turn, would validate the perception that the suspension was not temporary but permanent.

Argentina's bad credit history is what motivated policymakers there not to follow the British example but to stand by the currency board, even at the risk of defeat in the recent presidential election. The hope is that investors will recognize that a country willing to endure a severe recession and soaring unemployment rates to preserve its commitment to avoid inflation has set aside policies of the past and achieved reform.